



A REVIEW

# Potency Paradox and Homoeopathy

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Hahnemann, the founder of Homoeopathy in many places of his vast literature has given full credit to Hippocrates or a discover of law of similia, Vital force, Single medicine but the Law of minimum dose was solely his invention. In available Hippocratic Cannon we cannot find any place for minimum dose though Hahnemann himself writes that this conception he also had borrowed from the Father of Medicine. Being a lifetime inquisitive student he had gone through the relevant literature available to his time, made this theories and postulations upto date and then came to the conclusion. The basic difference lies between drugs and poisons is in its quantity was known to Hahnemann but his search continued to understand what should be the parameter to determine the quantity. As we all know that Hahnemann had started practicing with almost the same drugs used in daily practice of the Galenians. Only the law of similia was minutely maintained. Here we must keep in mind that the word potency varies at a long distance to the dose, but how we would like to be with R. E. Dudgeon. He says, *"It is impossible so to separate the dynamization (potehnization) theory from the doctrines*

*respecting the dose as to be able to treat of the one without reference to other."*<sup>1</sup> Actually both these theories were developed simultaneously and they are, if regarded as separate theory, are contemporary to each other. So we are fusing these two topics under the same heading.

The conception of dynamic was often employed at that time; so, for example, Hufeland states in the "System der praktischen heilkunde", of the dynamic type of cure: *"it has the purpose to transform only the stimulus relation or the living activity."* Hahnemann also at first employed the word in this sense – we would probably today say "functional" – thus, for example, in his publication "Antidotes of some heroic vegetable substances" where he speaks "dynamic" action besides the chemical drug effect. In a quite similar way he employs the word "dynamic" in contrast to "chemical" in the foreword to the "Drug Treasury" (1800, I, 17ff, Stapf)<sup>2</sup>.

Near 1801 – 02 the word dynamic appears for the first time in the conception of diseases. In the 'Monita uber die drei gangbaren Kurarten' (1801) he differentiated disease from materia organism as bladder stone, splinter in the finger, crushed skull

fracture etc., from the ‘*immaterial dynamic causes*’, to which he counts he counts ‘*innumerable army of the remaining*’ (Vide infra)<sup>3</sup>.

Regarding the inception of the dynamic concept we can quote Boyd. He writes, “Exactly at the time when these dynamic conceptions developed in Hahnemann, we find that the great philosopher Schelling, who occupied himself most of all with the ‘philosophy of medicine’, had quite similar thoughts and one has often considered Hahnemann as influenced by Schelling, without attempting as far as I know to introduce proof in particulars. The circumstance satisfied that one found in both conceptions which one did not understand and on this account both were designed as Mystics and thrown in to discard. But undoubtedly it signifies a misuse of the word mystic when one attempts to characterize by it all which does not fit into a mechanistic conception. The word mystic has very definite meaning and it should remain limited to that orientation to the word as we find it in the middle age mystics such as Eckehart, who would obtain knowledge of the world fundamental essence not by reason but by meditation (Versenkung)”<sup>4</sup>.

Again Boyd writes, “Schelling and Hahnemann in respect to their basic orientation were quite opposite minds. Accordingly Hahnemann, who strove for simple pure experience, has often expressed himself in a depreciatory manner on Schelling’s natural philosophy with its tendency to fly over the borders of experience by strongly speculative thoughts and Hahnemann did this particularly in his publication titled ‘On the value of the speculative system of medicine’ though without there by mentioning Schelling’s name and there is a distinct allusion to Schelling’s three ‘dimensions’ in the *materia medica pura*”<sup>5</sup>.

The opposite position to Schelling’s method of speculation and his slight appreciation of experience, however, did not prevent Hahnemann from being stimulated and influenced by Schelling in regard to single question.

In the first place, it is the dynamism of Schelling’s natural philosophy which could give him the courage to pursue this after he himself had already entered in to it. Schelling proceeds in the general structure of nature out from the material which he attempts to understand by a peculiar type of ‘dynamic atomistics’. Then he steps to the so called ‘imponderables’, as he together with so many

other physicists of the same time called them, to the manifestations light, warmth, electricity, magnetism conceived by us at present energies. Also in the organic world he permits the same ‘principles’ to act as higher’ potencies.

From his conception of matter Schelling follows the infinite divisibility of matter. “*In every part of space thus there is a moving power, consequently also motion, therefore the divisibility of even so small a part of matter from all others proceeds into infinity*”<sup>6</sup>.

In a similar way as Schelling conceived the so-called imponderables stand between the material and organic world, so also with Hahnemann in the drug powers. They work not ‘automatically’ nor chemically, but ‘dynamically’ and ‘almost spiritually’.

Boyd says, “One will only understand Hahnemann and in particular his theory of dilutions when they learn of it in the frame of his other conceptions, particularly his conception of the idea ‘dynamic’. The favourite objection that any medicinal substance is no longer present in the thirtieth dilution is apparent. If one would reproach Hahnemann with the well-known example that if one would place a few drops of original tincture into sea at Hamburg, then after some time thirtieth dilution would be created at Constantinople, then Hahnemann would have said that he did not grasp his conception. He did not dilute but potentised or much more dynamized. What this signifies, will be best understood from the publication “How can small doses — still have great power”? Here he explains: If one lets a drop of drug fall into a great sea, since the drug power soon dissipates into nothing one cannot make from this an intensive mixture of the drug. Only through strong shaking of the fluid and the trituration in powder of small amounts dose the drug power develop. For understanding he calls attention to the experiments of Count Rumford in Munich, who through rapid movement of two metal plates on each other heated a room from warmth thereby developed. In metals an inexhaustible supply of heating substances (in latent, bound, undeveloped state) was present.”<sup>7</sup>

The ever confusing and paradoxical doctrine of drug dynamization was included in the Fifth Edition of *Organon*. This does not mean that within four years suddenly Hahnemann discovered that the drugs are to be dynamized in this way. Because we are getting from year 1796 on words he was experimenting with this very

special part, the seed was there embryo formed later and the child was born in 1833. We shall see the evolution of the minimum dose concept at first.

### Evolution of the conception :

1796 :

Homoeopathy is said to be born in this year as in Hufeland's journal<sup>8</sup> the article named, "Essay on new principal for ascertaining the curative power of drug" was published. This says about 'small dose' but did not say what he means by 'small'. However this is evidenced that he meant the medicinal doses, which dependent directly on their physiological effects and which therefore measured according to his later views, were still completely large in quantity and effect. But nowhere is there any mention made of any peculiarity in the mode of preparing the medicines. The advice of this article was only to prescribe the drugs with the symptom similarity. But, what can be supposed, that the high doses of the medicines night have produce so called Homoeopathic Aggravation so Hahnemann must have started thinking of decreasing the dose from that very juncture.

1798 :

This year another article published in the Hufeland's Journal titled, "Some kind of continued and remittent fever"<sup>9</sup>, He recommends Arnica root in doses of several grains, Ignatia in doses of 2 – 3 grains for children of 7 – 12 years; Opium of one fifth of one-half grain; Camphor 30 – 40 grains and Ledum 6 – 7 grains.

1798 :

The next article named, "Some periodical and Hebdomadal diseases"<sup>10</sup>, we find him to prescribe 8 grains of Ignatia and China of ½ - 1 grain.

1798 :

The first hints regarding dilution is found in the translation of the second part of the Edinburgh Dispensatorium (Leipsic, 2 vol.) Silver Nirtate was recommended by Boerhaave in doses of 2 grains, worked up in to pills with breadcrumbs and sugar; Hahnemann considered that too strong, and suggested a very dilute preparation.

In the same year, in the "Apothecarie's Lexation", he recommended Sabina, in very small doses and

Hyocyamus in "very small doses according to my method one sixth to one thirtieth grain (0.001 – 0.002 grams) of the concentrated juice given in solution". Stramonium he liked to administer only in the hundredth of even thousandth part of a grain of the concentrated juice. Of Veratrum album he says that this remedy is one of the most valuable medicines if used in a thousand times smaller dose than those used by ancients.

1799 :

In this year he suddenly announced without particular explanation very small and so-called Infinitesimal Doses. Most probably it is to be assumed that the unwelcome aggravations and secondary effects, which followed upon the remedies prescribed according to the law of similars, induced this keen and careful observer to decrease the doses more and more.

1800 :

In the "Treasury of Medicine" or the "Collection of selected prescriptions" there is an increasing number f remarks concerning very much smaller doses, and on one occasion he writes, "As the physician of to day will not consider giving one ten millionth part of a remedy, therefore Arsenic is not a medicine for them".

From his work on this subject we can see what self-sacrifice and precaution, what inexhaustible industry and zeal Hahnemann displayed in testing the effects of the medicines on himself and others.

1801 :

The first detailed statement about the dilution was made in connection with the publication of his curative measures and prevention of scarlet fever. In chapter vii and in supplement 39 we have already given some account of it. The book titled "Cure and prevention of Scarlet Fever" (Gotha. Beaker. Edited by Buchner, and reprinted in 1844), he says, "For internal use, I take a drop of this tincture and mix it intimately with 500 drops of dilute alcohol, and one drop of this mixture like wise with other 500 drops of dilute alcohol, shaking the whole well. Of this diluted tincture of Opium (which contains in every drop of one five millionth part of a grain of Opium) one drop given in internally was amply sufficient in the case of a child of ten years, to remove the above state. It is unnecessary to repeat these doses oftener than 24 hours,



and that sometimes only a couple of times throughout the whole fever, for which the more frequent or more occurrence of these symptoms must be our guide.”<sup>9</sup> For the prevention of this fever he writes, “Of this weak solution of belladonna we give to those not affected with scarlet fever, with the intension to make them uninfected by the disease, — to a child one year old, two drops (to a younger child one drop), to one two years old, three — one three years old, four — to a child four years old — a dose every seventy two hours, as long as the epidemics lasts, and four weeks there after”<sup>10</sup>. This is significant. Dudgeon declares this work as “the Germ of future dynamization theory”<sup>11</sup>.

This doctrine naturally started some agitation in the medical fraternity and so we see Hufeland asking with a sneer, “What effect can the hundred – thousand part of a grain of Belladonna have?” The reply comes in the short article entitled, “On the power of small dose of the medicine in general and belladonna in particular” (Hufeland’s Journal, Vol. 13, Pt. 2) in the same year. He refers the mode of preparation of Belladonna and declares “a single drop of such solution mixed with six ounces of water, by being vigorously shaken, will possess enormous power”. He adds that “as the medicine does not act automatically but dynamically, it excites much more severe symptoms than compact pills, contains a millionth time more medicine is capable of doing”<sup>12</sup>. Though what he says all from his clinical experience carries no scientific expression but here we get the ‘embryo of his Dynamization theory’.

1805 :

Now until the appearance of the article “Medicine of Experience”, does he speak again of the “Smallest Possible Doses”, in which remedies are to be used. But whenever he gives details he mentions only the 100<sup>th</sup>, 1000<sup>th</sup> or 1,000,000<sup>th</sup> part of a medicinal dose. With reference to opium he says, “If a certain small dose of diluted tincture of poppy juice is able to take away a certain amount of unnatural sleepiness, then the hundredth and probably also the thousandth part of this poppy juice solution will be almost completely adequate for the same purpose. In the same way the dose can be still further diluted without the smallest doses ceasing to exert the same curative aid as the first”<sup>13</sup>. In another place he generalizes this assertion in the form of truism:

“A medicine which when given by itself in sufficiently large doses to a healthy individual produces a definite effects, that is, a number of its own peculiar symptoms, preserving its own tendencies, will be able to produce them even in the smallest dose – For curative purposes increased by small doses are sufficient — If instead of smaller and smaller doses, increasingly large ones are given, then (after the original disease has disappeared) there arise merely medicinal symptoms, a kind of artificial and unnecessary disease – How much the sensitiveness of the body towards medicinal stimuli increases in illness, can only be appreciated by the accurate observer. Especially when the disease has become very serious, this suppresses all beliefs”<sup>14</sup>.

1906 :

Another article “What are poisons? What are medicines?” published in 1806 in Hufeland’s Journal says that the correct and judicious preparation of poisons could make them into medicines. It reads, “And which of these mild\* remedies would they substitute for those substances which are valuable on account of their peculiarity great power? As every particular substance has its own peculiar mode of action that can not be exactly replaced by any thing else, what would those gentlemen substitute for Bryonia, when this remedy is precisely indicated, except Bryonia itself? – Where the common people think they see only objects of horror, there the wise man sees objects of the deepest respect and makes use of them with thankfulness to the eternal Source of Love. Sapere Aude!”<sup>15</sup>

These few general indications are all that we can see in Hahnemann’s works concerning the development of the homoeopathic theory of doses during 1801 – 1806. It is found that in the aforesaid years he was prescribing his remedies in large doses. For example for vertigo and very severe headache accompanied by vomiting one, a patient receives six powders of 6 grain Anthemis pyrethum. Mercury is given in six 1-grain powders in a case of abdominal pain with stiffness in the sacral region, tenesmus and moisture in rectum<sup>16</sup>. Apart from these massive doses of medicine we find some prescriptions that approach a lower degree of dilution.

In the patients’ note for 1800 – 1801 there are examples of prescribing 1/18,000 of a grain of Aconite, 10 drops morning and 10 drops in the evening; capsicum,

1/ 2,000 grain. Here we shall find that Pulsatilla is prescribed in doses of 1/ 400,000 and at times of 1/ 600,000 whilst in Chamomilia the single dose amounts frequently used only to 1/3840,000,000. Nux Vomica is not yet so strongly diluted, and in the year 1801 it is still being administered in doses of 1/ 12,000.

But this is some what changed in the 1802 when Veratrum is administered in 1/200,000 Mezereum in 1/ 400,000, Ledum in 1/200,000.

A peculiar change is observed in 1803 when Hahnemann gradually adopts stronger doses and then later returns higher degree of dilutions. We may site the following examples for substantiating our words. Ignatia 1/ 1,200,000; Veratrum 1/ 4,800,000; Nux Vomica 1/ 1,200,00 to 1/ 1,240,000; Hyocyamus 1/100,000,000 and etc.

*1807 – 1809 :*

The diaries of 1807 and 1808 afford us little information as regards the further process of clarification through the inexhaustible seeker was passing. In this absence of definite statement we might see strong reason to believe that Hahnemann desires to preserve complete freedom at this time in the individual prescriptions<sup>17</sup>. The writings of 1809 do not disclose any marked changes. The article named “Monita About The Three Current Modes Of Healing<sup>18</sup>” (Hufeland’s Journal, vol. Xi, pt. 4) the author merely established the fact that in certain bilious conditions one single drop of Arnica Root tincture was sufficient to take away all fever. In the same year “Reply to a question about the prophylactic for Scarlet fever” (Hufeland’s Journal, vol. 27. pt. 4) says some thing about the small doses.

*1810 :*

This year observed Organon for its first edition. This, at the present edition, is full with references and comments on the theory of dynamization. The Section 246 says “ – And this may be very happily affected, as recent and oft-repeated observations have shown, under three conditions: firstly, if the medicine selected with the utmost care was perfectly homoeopathic; secondly, if it was given in the minutest dose, so as to produce the least possible excitation of the vital force, and yet sufficient to effect the necessary change in it; and thirdly, if this minutest yet powerful dose of the best selected medicine be repeated at suitable intervals, which experience shall

have pronounced to be the best adapted for accelerating the cure to the utmost extent, yet without the vital force, which it is sought to influence to the production of a similar medicinal disease, being able to feel itself excited and roused to adverse reactions”<sup>19</sup> and the subsequent footnote explains it in a vast manner<sup>20</sup>. The § 247 tells, “Under these conditions, the smallest doses of the best selected homoeopathic medicine may be repeated with the best, often with incredible results, at intervals of fourteen, twelve, ten, eight, seven days, and, where rapidity is requisite, in chronic diseases resembling cases of acute disease, at still shorter intervals, but in acute diseases at very much shorter periods - every twenty - four, twelve, eight, four hours, in the very acutest every hour, up to as often as every five minutes, - in ever case in proportion to the more or less rapid course of the diseases and of the action of the medicine employed, as is more distinctly explained in the last note”<sup>21</sup>.

*1811:*

In the next year the *Materia Medica Pura*<sup>22</sup> was published where not a single word appeared as per the size of the dose<sup>23</sup>.

*1812 – 1815:*

The “Spirit of Homoeopathic doctrine of Medicines” (Allegmeine Anzager, March, 1813) records Arnica and Nux Vomica is being prescribed in 18<sup>th</sup> and 9<sup>th</sup> centesimal scale.

The definite direction about this theory came in the article named, “The treatment of Typhus fever at present prevailing”. Here we see Bryonia and Rhus tox is administered in 12<sup>th</sup> centesimal dose and Hyocyamus in 8<sup>th</sup>.

*1816 – 1824 :*

The second volume of *Materia Medica Pura*, which was published in the year 1816, says about every individual remedies with concerning he size and dilution of the dose. Here we see Arsenic is recommended in 12<sup>th</sup>, 18<sup>th</sup>, and 30<sup>th</sup> dilution.

In 1817, in the third volume of *Materia Medica Pura* says about prescribing China at 12, Asarum at 12 or 15 and Silica at 15 dilutions.

*182524 and 25 :*

This experiments were continues. But in true sense





Hahnemann gives his explanation in the year of 1825. This year is very important in the history of dynamization as from the practitioners a strong voice raised about this theory of dynamization. They said that Homoeopathic dilution is nothing but putting a drop of medicine in to the lake of Geneva<sup>26</sup>. We found Hahnemann replying at the same journal\* through an article named, “How can small doses of such very attenuated medicines as Homoeopathy employs have any action on the sick”. He begins by saying that the question is foolish “because by succussion and trituration employed in making Homoeopathic dilutions are left out of consideration”. By his own words, *“In the preparation of Homoeopathic attenuation a small portion of medicine is not merely added to an enormous quantity of non-medical fluid, or only slightly mingled with it but by the prolonged succussion and trituration, there ensues not only most innate mixture, but at the same time and this is the most important circumstance there ensues such a great and higher – to unknown and undreamt change, by the development and liberation of dynamic powers of the medicinal substance so treated, so as to excite astonishment”*<sup>27</sup>. However this article did not answer how this thing happens scientifically.

#### 1828 – 1833 :

The preface of Thuja, in the fifth volume of *Materia Medica Pura* published in 1826, says the higher dilution of medicine *i.e.* the 30<sup>th</sup>, or even the 60<sup>th</sup>, if each dilution is shaken for 10 or more times, so far from being inferior in strength to the lower dilutions, are actually more powerful. At this time we shall see Hahnemann is restricting the potency at 30<sup>th</sup>. In a letter written to Dr. Scherter he has expresses his disapproval of dynamization for more than 30<sup>th</sup> potency<sup>28</sup>.

The theory of drug dynamization has introduced in *Organon* in the year 1833 at its fifth edition where he has expressed the minute details about the preparation of Homoeopathic potencies<sup>29</sup>.

#### 1833 – 1843 :

The latest over the dynamization theory came out during this time in the mane of fifty-milicimal potency. Though this part is controversial and the authenticity is a question but we cannot stop discussion before saying any word in it. This theory was out of the vision except when in the year – Dr. P. Smidth orated it in the —. The

very section that is 270 reads, “In order to best obtain this development of power, a small part of the substance to be dynamized, say one grain, is triturated for three hours with three times one hundred grains sugar of milk according to the method described below 1 up to the one-millionth part in powder form. For reasons given below (b) one grain of this powder is dissolved in 500 drops of a mixture of one part of alcohol and four parts of distilled water, of which one drop is put in a vial. To this are added 100 drops of pure alcohol and given one hundred strong succussions with the hand against a hard but elastic body. This is the medicine in the first degree of dynamization with which small sugar globules may then be moistened and quickly spread on blotting paper to dry and kept in a well-corked vial with the sign of (I) degree of potency. Only one globule of this is taken for further dynamization, put in a second new vial (with a drop a water in order to dissolve it) and then with 100 powerful succussions.

With this alcoholic medicinal fluid globule are again moistened, spread upon blotting paper and dried quickly, put into a well-stoppered vial and protected from heat and sun light and given the sign (II) of the second potency. And in this way the process is continued until the twenty-ninth is reached. Then with 100 drops of alcohol by means of 100 succussions, an alcoholic medicinal fluid is formed with which the thirtieth dynamization degree is given to properly moistened and dried sugar globules.

By means of this manipulation of crude drugs are produced preparations, which only in this way reach the full capacity to forcibly, influence the suffering parts of the sick organism. In this way, by means of similar artificial morbid affection, the influence of the natural disease on the life principle present within is neutralized. By means of this mechanical procedure, provided it is carried out regularly according to the above teaching, a change is effected in the given drug, which in its crude state shows itself only as material, at times as un-medicinal material but by means of such higher and higher dynamization, it is changed and sublimed at last into spirit-like medicinal power, which, indeed, in itself does not fall within our senses but for which the medicinally prepared globule, dry, but more so when dissolved in water, becomes the carrier, and in this condition, manifests the healing power of this invisible force in the sick body”.

#### Era of further development :

Though Hahnemann restricted in 30<sup>th</sup> potency but

his followers were in the mood of increasing the dilution. As we see Dr. Bolus, commenting on it rather poetically said

*“When taken  
To be well-shaken”*

This process of dynamization that is spiritualization of substances by the process of continuous demineralization favored by Count von Karsakoff very much. He discarded the level at 30<sup>th</sup> but he favored the idea of diluting medicine up to 1500<sup>th</sup><sup>30</sup>.

This idea of Count impressed Dr. Gross and he gravely notified that he had communicated Blood-Power to ever so many sugar-globules by adding to them one globule imbibed with a dilution of his own blood, and with this wonderful medicine he had cures congestion of various sorts.

Dr. Plaubel of Gotha said it did not matter if the globules fell out of the power in which they had been placed, the milk-sugar in the powder was already infected by them and contained all their medicinal virtues.

Stallmeister placed a new idea. He said for attaining the further attenuation it is never necessary to the dynamization of medicine, but that continuous succession without dilution is sufficient.

A good number of Homoeopathic stalwarts like Boenninghausen, Dr. Stapf, and Dr. Rummel and Dr. Hering were in favour of increasing the potency. Hering shouted, “Higher, higher every year” across Atlantic. This further added fuel in the theory and very soon Homoeopath got 100, 200, 500, 800, 1000, 1500, 2000, 10,000, 50,000 and even higher potencies.

### **Hahnemanian dynamization – An ever time paradox :**

The definition of dynamization can be proposed as a process, known to be affected by mechanical action upon the smallest portion of the drug substances by means of rubbing or shaking through addition of an inert (non-medical) substance (Vehicle) powder (sugar of milk) or liquid (water or alcohol) in a definite series.

To recap that Hahnemann discovered the centesimal scale and fifty-millicimal scale and decimal scale was discovered by Hering. The general ruling of centesimal scale for achieving the next potency is one part of the previous potency is mixed with ninety-nine part of the vehicle and shaken the mixture with ten strokes. If we try to see the paradox we have to take a short travel on a simple mathematical calculation. The first potency, in

this process has got 1/100<sup>th</sup> part of the original drug substance. The second potency bears, 1/1000<sup>th</sup> part (one part of 1/100<sup>th</sup> part of the drug substance plus 99 parts of vehicle). So, in this way, 3C carries 1/10<sup>6</sup> part of original drug substance. So at the 12C we shall get 1/10<sup>24</sup> part of the drug substance.

Avogadro, the famous scientist published a hypothesis (1860) that the numbers of molecule in a gram molecular weight is  $6.06 \times 10^{23}$ . Scientists like J. Perrin (1909), B. B. Boltzward and Rutherford (1911) and R. A. Millikan (1917) supported this. They, as well as the branch of physics have supported the idea with a minor correction that the number should be  $6.023 \times 10^{23*31}$ . And so as per this hypothesis after 12C or 24 X (Decimal scale of Hering) potency there never remain any molecule of the original substance. And this fact has been tested by High performance Liquid Chromatography (HPLC), Gas Liquid Chromatography (GLC) and Atomic Absorption Spectrometer (AAS).

### **Search for the scientificity :**

The theory of dematerialization leading to spiritualization is tried to explain at various times. Surgeon Tietze suggested that while rubbing he observed that the particles are attracted and repelled in an electrical fashion and while doing this in a dark, a luminary appearance occurred. But this occurs in rubbing the sugar of milk even without any medicinal substances.

Dr. Segin made a series of observations with microscope to see whether the infinitesimal contains any demonstrable particle of the medical matter or not. Under the microscope, which can enlarge the objects 70 times larger he saw that the first 6<sup>th</sup> trituration of metallic copper shows a blackish- brown particles of copper mingled throughout the milk sugar. He again said that by seeing the Solar Microscope he has seen the particles at 200<sup>th</sup> dilution but it is not possible as the road crosser of Avogadro number is at 12C only.

Dr. Mayrhofer did this same test in more scientific manner. At first he examined the milk sugar, alcohol, distilled water in order to become familiar with their normal appearance. After that he triturated the metal. When this is over he dissolved the whole trituration to separate out the metallic particles from the milk sugar. Then this he had seen under microscope. He then declared several facts –The first trituration contains 2, 88, 000 part of a grain.



- The second trituration contains 14,400,000 part of a grain.
- The third trituration contains 720,000,000 part of a grain.

Dr. Koch examined the third trituration of Mercury under microscope and found many small particles. Dr. Rummel said that he saw a number of Mercury atoms are running across the others. But this idea is impossible.

Doppler, in the year 1837 said that it is not justified to estimate the effects of substance by the size of their mass, but their effects are proportionate to the extent of their surface<sup>32</sup>. Doppler said with this enormous increase in the surface area will proportionately increase the free electricity in them and this acts on the free nerve endings and produces the effects.

The Italian Physiologist, Abbè Spallanzani had done a marvelous work. His experiment of Frog's semen is a great work. His observations are :

- When three grains of Frog's semen mixed with equal part of water it is found that one-drop of the same fertilizes a large number of ova.
- The same quantity of Frog's semen now mixed with four times the amount of water the result remained the same.
- In one pound of water the result was unchanged.
- In two pounds of water the result was unchanged.
- When one drop is taken from three grain mixture and again mixed with 18 onus of water it had fertilized the eggs as of the pure semen.

As per the experiments were done at 20<sup>th</sup> century the following results were received.

- In 1936 W. E. Boyd published the results of his research work made with spectrograph. There the sensitivity limit was found to reach only to the 7<sup>th</sup> decimal of Gold, Arsenic and China.
- In the same time O. Lesser and K. Jenner said to have the sensitivity upto 9<sup>th</sup> centesimal or 18 decimal scales.
- Experiments performed by Raulin, Charles Richet and Javillier were first who demonstrated the role of oligoelements, so-called bio-catalists, on the growth of *Aspergillus niger* on the yeasts<sup>33</sup>. Though this experiment is not Homoeopathic but it in turn supports the action of infinitesimal doses.
- Dr. A. C. Dutta says that on conducting experiments with these infinitesimal doses of Ferrum sulphuricum on wheat seed he has got evidential results.

- Dr. Nebel injected the mallein in 30 and 200 potency in the ear of rabbit brought on inflammatory changes on the same ear but nothing happened on the opposite ear.

### **Bio-chemical investigations :**

- V. M. Persson has shown the effect of Mercuric chloride in 120 decimal dilutions on fermenting starch<sup>34</sup>.
- Dr. Boyd experimented with 61 decimal dilution 10<sup>61</sup> and naturally carries no molecule) of Mercuric Chloride and proved its ability of hydrolyze the starch.

### **Botanical investigations :**

- In 1923 Kolisko soaked wheat seeds in 10<sup>-30</sup> dilution of iron sulphate, Antimony trioxide and a Double salt of copper. The observation reports that the growth was promoted by lower dilutions, inhibited by higher dilutions and further stimulated by more high dilutions.
- In 1965 Georg Unger and Wilhelm Pelikan experimented the same thing with Silver nitrate at 8<sup>th</sup> decimal to 18<sup>th</sup> decimal potency. They tested the effects of 12 different micro-doses. The series was repeated for 240 times. They put the parameter of the length of the shoots. The results were
- Increased at 8 – 11 decimal.
- Dropped at 12 decimal.
- Increased at 13 – 14 decimal
- Joseph Roy in 1932 tested with Barley seeds in 3C, 6C, 9C, 12C, and 18C, which provided different weights at different potency level.
- Netien experimented with Cupper sulphate with pea in various dilutions and obtained various weight of the peas.

### **Bacteriological investigations :**

H. Hunker in 1927 experimented with *Paramecia* with different dilutions of atropine, cocaine sulphate and proved the different levels of growth of the bacteria.

### **Zoological investigations :**

- Krawkow in 1923 proved that Magnesia in 24<sup>th</sup> decimal dilution causes a thirty per cent reduction in blood flow. Histamine in 30<sup>th</sup> dilution causes twenty three per cent reductions on the same.



- Stearns did a band of various experiments to show the efficacy of these infinitesimal doses<sup>35</sup>.
- Koenig in 1927 has demonstrated the varied growth rates of tadpoles using the various dilutions of lead nitrate and Silver nitrate.
- J. Tetau and M. Tetau inject Thuja 9C intoxications and then the injection of the same brought about normalcy in them.<sup>36</sup>

### Answers to this paradox :

Apart from this many theoretical explanations are cited to solve this paradox. Dr. Rue said that by the process of dynamization the latent power of the drugs become completely rouse and they set free to act. In another he says that this is nothing but the process of sub-dividing the power simultaneously with the division of the matter. Dr. Kretschmar says that the amount of succussions given has nothing to do with the increase power of the drugs; single succession is as good as two or more. Dr. Weber says that the electricity developed by this process is the cause of its action. Dr. Aegidi says that no development of power takes place in this process but 30, 200 are nothing but the degrees of divisions. Dr. Rummel said that the friction is the cause of the development of energy.

The current medical paradigm thinks in an opposite way. They say that the position (A positively charged molecule like of an electron) takes the impression of the original drug substance and when there is no original drug substance not remaining at the higher dilution level, this impression of the molecules acts as that of the original ones<sup>37</sup>.

Not only the scientific experiments and explanations but also, as we have known that the vitamins in our body acts in micro doses. In order to produce atomic energy only few grams of for example Radium is necessary. This is because the quantum physics have affirmed us that there is no difference lies in the mass and the energy. Hahnemanian theory of Doses and Dynamization actually is the precursor of this idea. This idea is not only scientific but at the same time revolutionary also<sup>38</sup>.

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- 6 Ibid / P = 380
- 7 History of Homoeopathy / Linn J. Boyd/ Ibid / P = 381
- 8 Samuel Hahnemann his Life and works / Richard Haehl/ Vol. 1/ Ibid / 66
- ≈ Hufeland's Journal, Vol. 5, pt. 1./ Life and Letters of Hahnemann/ Bardford/ B. Jain/ New Delhi/ 1999/ P=517
- φ Hufeland's Journal, Vol. 5, pt. 1./ Life and Letters of Hahnemann/ Bardford/ Ibid / P=518
- 9 The lesser writings of Hahnemann/ R. E. Dudgeon/ B. Jain/ New Delhi/ 2001/ P = 375
- 10 The lesser writings of Hahnemann/ R. E. Dudgeon/ Ibid / P = 381
- 11 Lectures on the theory and practice of Homoeopathy/ R. E. Dudgeon/ Ibid / P = 338
- 12 Lectures on the theory and practice of Homoeopathy/ R. E. Dudgeon/ Ibid / P = 340./ The lesser writings of Hahnemann / R. E. Dudgeon/ B. Jain/ New Delhi/ 2001/ P = 385 - 389
- 13 Samuel Hahnemann his Life and works / Richard Haehl/ Vol. 1/ Ibid / P = 313
- 14 Samuel Hahnemann his Life and works / Richard Haehl/ Vol. 1/ Ibid / P = 314
- \* "I often read in medical works the cool condemnation of the most powerful substances in some such terms as theses; 'Conscientious physicians are right to refrain from the employment of such dangerous substances, as there are safer and milder remedies that may be substituted for them'. Tell us these safer, milder remedies? No reply".
- 15 What are poisons? What are Medicines? /Hahnemann's unpublished writings/ Dr. M. Singh/ Homoeopathic Publications/ Kolkata/ 2004/ P = 19 - 20
- 16 Samuel Hahnemann his Life and works / Richard Haehl/ Vol. 1/ Ibid / 314
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- 18 The lesser writings of Hahnemann / R. E. Dudgeon/ Ibid / P = 552
- 19 Hahnemann/ Organon of medicine/ 5th & 6th Edition/ tr. By Dudgeon & Boericke/ B. Jain/ New Delhi/ 1996/ P= 122
- 20 In the former editions of the Organon I have advised that a single dose of a well-selected homoeopathic medicine should always be allowed first fully to expend its action before a new medicine is given or the same one repeated - a doctrine which was the result of the positive experience that neither by a larger dose of the remedy, which may have been well chosen (as has been again recently proposed, but which would be very like a retrograde movement), nor, what amounts to the same thing, by several doses of it given in quick succession, can the greatest possible good be effected in the treatment of diseases, more especially of chronic ones; and the reason of this is, that by such a procedure the vital force dose not quietly adapt itself to the transition from the natural disease to the similar medicinal disease, but is usually so violently excited and disturbed by a larger dose, or by smaller doses of even a homeopathically chosen remedy given rapidly one after the other, that in most cases its reaction will be anything but salutary and will do more harm than good. As long as no more efficacious mode of proceeding than that then taught by me was discovered, the safe philanthropic maxim of *sin non juvat, modo ne noceat*, rendered it imperative for the homoeopathic practitioner, for whom the weal of his fellow-creatures was the highest object, to allow, as a general rule in diseases, but a single dose at a time, and that the very smallest, of the carefully selected remedy to act upon the patient and, moreover, to exhaust its action. The very smallest, I repeat, for it holds good and will continue to hold good as a homoeopathic therapeutic maxim not to be refuted by any experience in the world, that the best doses of the properly selected remedy is always the very smallest on in one of the high potencies (X), as well for chronic as for acute as for acute diseases - a truth that is the inestimable property of pure homoeopathy and which as long as Allopathy and the new mongrel sect, whose treatment is a mixture of allopathic and homoeopathic processes is not much better continues to gnaw like a cancer at the life of sick human beings, and to ruin them by large and ever larger doses of drugs, will keep pure homoeopathy separated from these spurious arts as by an impassable gulf. On the other hand, however, practice shows us that though a single one of these small doses may suffice to

accomplish almost all that it was possible for this medicine to do under the circumstances, in some, and especially in slight cases of disease, particularly in those of young children and very delicate and excitable adults, yet that in many, indeed in most cases, not only of very chronic diseases that have already made great progress and have frequently been aggravated by a previous employment of inappropriate medicines, but also of serious acute diseases, one such smallest dose of medicine in our highly potentized dynamization is evidently insufficient to effect all the curative action that might be expected from that medicine, for it may unquestionably be requisite to administer several of them, in order that the vital force may be pathogenetically altered by them to such a degree and its salutary reaction stimulated to such a height, as to enable it to completely extinguish, by its reaction, the whole of that portion of the original disease that it lay in the power of the well-selected homoeopathic remedy to eradicate; the best chosen medicine in such a small dose, given but once, might certainly be of some service, but would not be nearly sufficient. — Now, in cases where he was convinced of the correctness of his choice of the homoeopathic medicine, in order to obtain more benefit for the patient than he was able to get hitherto from prescribing a single small dose, the idea often naturally struck him to increase the dose, since, for the reason given above, one single dose only should be given; an, for instance, in place of giving a single very minute globule moistened with the medicine in the highest dynamization, to administer six, seven or eight of them at once, and even a half or a whole drop. But the result was almost always less favourable than it should have been; it was often actually unfavourable, often even very bad - an injury that, in a patient so treated, is difficult to repair. —I perceived that, in order to discover this true middle path, we must be guided as well by the nature of the different medicinal substances, as also by the corporeal constitution of the patient and the magnitude of the disease, so that - to give an example from the use of Sulphur in chronic (psoric) diseases - the smallest dose of it (tinct, sulph. X<sup>o</sup>) can seldom be repeated with advantage, seen in the most robust patients and in fully developed psora, oftener than every seven days, a period of time which must be proportionally lengthened when we have to treat weaker and more excitable patients of this kind; in such cases we would do well to give such a dose only every nine, twelve, or fourteen days, and continue to repeat the medicine until it ceases to be of service. We thus find (to abide by the instance of sulphur) that in psoric diseases seldom fewer than four, often

however, six, eight and even ten doses (tinct. sulph. X°) are required to be successively administered at these intervals for the complete annihilation of the whole portion of the chronic disease that is eradicated by sulphur - provided always there had been no previous allopathic abuse of sulphur in the case. Thus even a (primary) scabious eruption of recent origin, though it may have spread all over the body, may be perfectly cured, in persons who are not too weakly, by a dose of tinct sulph. X° given every seven days, in the course of from ten to twelve weeks (accordingly with ten or twelve such globules), so that it will seldom be necessary to aid the cure with a few doses of carb. veg. X° (also given at the rate of one dose per week) without the slightest external treatment besides frequent changes of linen and good regimen./ same.

- 21 Same
- 22 Dresden, Arnold, 6 vols. Vol 1 1811, vol. 2 1816, vol. 3 1817, vol. 4 1818, vol. 5, 1826, vol. 6, 1827.
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- 26 The lesser writings of Hahnemann / R. E. Dudgeon/ Ibid / P = 728
- ♣ Reine Arzneimittellehre, pt. Vi, 1st Edition, 1827.
- 27 The lesser writings of Hahnemann / R. E. Dudgeon/ Ibid / P = 728
- 28 Lectures on the theory and practice of Homoeopathy / R. E. Dudgeon / Ibid / P = 352
- 29 One-third of one hundred grains sugar of milk is put in a glazed porcelain mortar, the bottom dulled previously by rubbing it with fine, moist sand. Upon this powder is put one grain of the powdered drug to be triturated (one drop of quicksilver, petroleum, etc.). The sugar of milk used for dynamization must be of that special pure quality that is crystallized on strings and comes to us in the shape of long bars. For a moment the medicines and powder are mixed with a porcelain spatula and triturated rather strongly, six to seven minutes, with the pestle rubbed dull, then the mass is scraped from the bottom of the mortar and from the pestle for three to four minutes, in order to make it homogeneous. This is followed by triturating it in the same way 6 - 7 minutes without adding anything more and again scraping 3 - 4

minutes from what adhered to the mortar and pestle. The second third of the sugar of milk is now added, mixed with the spatula and again triturated 6 - 7 minutes, followed by the scraping for 3 - 4 minutes and trituration without further addition for 6 - 7 minutes. The last third of sugar of milk is then added, mixed with the spatula and triturated as before 6 - 7 minutes with most careful scraping together. The powder thus prepared is put in a vial, well corked, protected from direct sunlight to which the name of the substance and the designation of the first product marked /100 is given. In order to raise this product to /10000, one grain of the powdered /100 is mixed with the third part of 100 grains of powdered sugar of milk and then proceed as before, but every third must be carefully triturated twice thoroughly each time for 6 - 7 minutes and scraped together 3 - 4 minutes before the second and last third of sugar of milk is added. After each third, the same procedure is taken. When all is finished, the powder is put in a well corked vial and labelled /10000, *i.e.*, (I), each grain containing 1/ 1,000,000 the original substance. Accordingly, such a trituration of the three degrees requires six times six to seven minutes for triturating and six times 3 - 4 minutes for scraping, thus one hour for every degree. After one hour such trituration of the first degree, each grain will contain 1/000; of the second 1/10,000; and in the third 1/1,000,000 of the drug used.\* Mortar and spatula must be cleaned well before they are used for another medicine. Washed first with warm water and dried, both mortar and pestle, as well as spatula are then put in a kettle of boiling water for half an hour. precaution might be used to such an extent as to put these utensils on a coal fire exposed to a glowing heat.

- 30 His process was somewhat different. He placed 1000 sugar globules un-medicated and added to them one globule imbibed with Sulphur 100 and shook the whole for a minute and claimed the desirable potency is achieved./ Lectures on the theory and practice of Homoeopathy/ R. E. Dudgeon/ B. Jain/ 1987/ P = 351
- 31 Homoeopathy in the Light of Modern Science/ A. C. Dutta/ B. Jain/ 1998/ P = 20 – 21
- 32 He said when a cubic inch of Sulphur is broken into million of equal parts, each not being bigger then the size of a sand the total surface area exceeds more than the six squire feet. When it is mixed with ninety-nine parts of non-medicinal substances and so on then on third trituration it provides a surface of two-squire kilometers is. In the same way the fifth trituration will be equal to whole Austria, at the sixth it will be Africa plus Asia and so on. Lectures on the theory and practice



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- 38 Interested students can refer Homoeopathic Science and Modern Medicine / Harris L. Coulter

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